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October 1, 2007

Wm. Craig Harper Executive Director/Technology Broadcast Media

The Honorable Kevin Martin Chairman Federal Communications Commission 445 Twelfth Street, SW Washington DC 20554

RE: Unlicensed Operation in the TV Broadcast Bands, ET Docket No. 04-186

Dear Chairman Martin:

As you know, better than anyone, television broadcasting is undergoing tremendous change as it transitions to digital transition. Belo has been a leader in digital television for over 10 years and was an early adopter in Dallas/Fort Worth and Houston, Texas, Seattle/Tacoma, Washington and Phoenix, Arizona.

As executive director of technology for our 20 television stations in 15 markets covering 14% of the U.S. television households, I am writing to you to express Belo's concern about placing unlicensed personal and portable devices in the television band. While unlicensed device proponents believe "sensing" can be used to avoid co-channel interference, this theory has never been proven in a real world environment.

On February 27th 1998 when WFAA-DT signed on and began to cause interference with Baylor Hospital's unlicensed wireless heart monitor systems operating on channel 9, we learned first hand about the effects of DT interference. Today we are still learning about the characteristics of digital transmission. As many have documented, and have learned from experience in the field, variations in digital signal levels make "sensing" highly suspect as a method of avoiding interference.

As you know, the devices proposed either failed or were only bench tested in the lab. Most importantly, leading engineers in our industry have documented that the sensing level proposed by the unlicensed device proponents, (-114 dBm), will not protect digital television reception. In fact, IEEE has told the FCC that the proposed sensing level contained in the NPRM, (-116 dBm), was not designed to be used as a "sensing threshold" for personal and portable unlicensed devices. To the contrary, this sensing level was designed by IEEE 802.22 as an additional level of protection for a fixed system that relied primarily on geolocation to insure the system did not interfere with television reception. In short, concluding that a proposed device met some arbitrary sensing level of (-114 dBm) provides no evidence that the device will protect over-theair digital television reception. The result is co-channel interference that may extend for kilometers.

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Furthermore, even if these devices correctly detected an occupied channel, operating them on a first adjacent channel could cause damaging interference. The Office of Engineering and Technology documented this fact extensively last spring. This interference will occur throughout a television station's service area.

We are still learning about the characteristics of digital transmission. For example, as with most digital systems, there is a cliff effect. Even small amounts of interference can cause a perfect digital picture to become unwatchable. Moreover, signal levels are not uniform throughout our service areas. It is probable to find locations with no signal next to locations where a digital television signal can be received perfectly. Over the next few years, we have to educate consumers about TV reception in the digital world a task made much more difficult if interference from unlicensed devices become predominant.

Just as we have experienced over the now almost 10 years of broadcasting in digital, we will have to shoulder the task of resolving interference and reception complaints from our viewers. I believe it will be impossible to track down interference problems from the potentially millions of unlicensed transmitters.

Mr. Chairman, we encourage you to refrain from allowing personal and portable unlicensed devices in the band that employ sensing as the primary mechanism for avoiding interference.

Respectfully,

cc: Ms. Dunia Shive

Mr. Dennis Williamson

Mr. Guy Kerr Mr. Jack Sander